Designing and Developing Video as an Instructional Media in English Language Teaching Setting

Shalawati\textsuperscript{1}, Missi Tri Astuti\textsuperscript{2}, Arini Nurul Hidayati\textsuperscript{3}, Sitti Hadijah\textsuperscript{4}
\textsuperscript{1,2,4}Universitas Islam Riau
\textsuperscript{3}Universitas Siliwangi
E-mail: \textsuperscript{1}shalawati@edu.uir.ac.id
\textsuperscript{2}missitriastuti@edu.uir.ac.id
\textsuperscript{3}arininurul@unsil.ac.id
\textsuperscript{4}sittihadijah@edu.uir.ac.id

Abstract
Using video in educational context has been established by many scholars as an effective instructional media to support teaching and learning process. There have been numerous videos are available on social media platforms that can facilitate both teachers and students to easily access them as learning resources. However, the teachers are challenged to be able to provide their own learning resources, such as videos which are aimed to deliver the lessons in more contextual and authentic senses. In this regards, this study is aimed to describe the design and development process of creating a video as an instructional media in English language teaching context. This study worked on research and development (R&D) approach through ADDIE (Analysis, Designing, Developing, Implementing, and Evaluating) framework. Documentation, observation, and assessment were administered as data collection techniques to support the design and development of the video. As a result, this paper depicts the researchers’ experiences on the design and development of a video lesson as well as the survey findings. Overall, ADDIE framework was found effective to guide the researchers in the design and development process of the video. Although the process was not a simple way to take, more efforts and time were invested to produce the instructional media. Implications of the findings for instructional design and recommendation for future research are also discussed.

Kata kunci: designing, developing, videos, instructional media, English

\textit{Merancang dan Mengembangkan Video sebagai Media Pembelajaran dalam Setting Pengajaran Bahasa Inggris}

\textbf{Abstrak}
Penggunaan video pada konteks pendidikan telah dibuktikan oleh banyak peneliti yang menunjukkan bahwa video sebagai media pembelajaran yang efektif untuk mendukung proses belajar mengajar. Sudah banyak video tersedia di platform media sosial yang dapat memfasilitasi guru dan siswa untuk dengan mudah mengakses video sebagai sumber belajar. Namun, guru ditantang untuk dapat menyediakan sumberbelajar yang mereka rancang dan kembangkan sendiri untuk para peserta

\textit{Lectura: Jurnal Pendidikan, Vol.13, No. 2, Agustus 2022}

Keywords: merancang, mengembangkan, video, media pembelajaran, bahasa Inggris

1. INTRODUCTION

The use of video as an instructional media in English language teaching is not new for a large number of English teachers in Indonesia because there have been numerous videos available and accessible on the internet. The rapid expansion of Youtube as a video-sharing site influences the spread of educational videos because it can facilitate the video creators to simply post their creations and the video users can easily access the videos. Youtube was found effective for students to explore more videos as learning resources, find more interesting learning atmosphere, and enhance their cultural understanding (Wang & Chen, 2020).

In ELT context, video is an effective tool to teach English because there have been considerable studies that have established the effectiveness of using videos instructional media to support the teaching and learning process, e.g Wang (2014) identified that teaching English videos materials present some benefits for the students: stimulating students’ autonomy and proactivity, motivating students in learning, presenting how the language is used naturally in various contexts of communication, facilitating students to have better understanding about values, social customs, and habits of English native speakers. The videos also can engage students because they contain audio visual information that can help teachers to easily encourage students to participate in the lessons (Brame, 2016). Video resources can also enhance students’ multicultural competences that enable them to enhance their self-perceived ability to use communication strategies in multicultural circumstances and prepare them from multicultural communication (Lin & Wang, 2018).

For many years, English language teachers have used to deploy “third-party videos” as learning materials, but the advancement of technology facilitates the teachers to create and share their own videos in teaching English, and even they also encourage their students to create their videos (Cowie & Sakui, 2021). The availability of smartphones, laptops, and associated expansion of software
applications for video creation, sharing, and collaboration has grown increasingly and this warrant an attempt of many English teachers to create their own video resources (Cowie & Sakui, 2021). Despite the ubiquitous of videos as learning resources, there is an interesting question raise in relation to how to design and develop video lessons (Ou et al., 2019).

To present appropriate instructional video in ELT context, particularly in Indonesia, the teachers should refer to the current syllabus that present detailed information on what sort of contents that the teachers should deliver to enhance the students’ English knowledge and skills. The current syllabus of Indonesian curriculum is namely 2013 curriculum emphasizes on building student’s affective, cognitive, psychomotor competences through scientific approaches, in this case, the instructional media, such as videos which are used to support the implementation of 2013 curriculum in ELT context have to link with the syllabus learning standards.

Although a large number of English videos on the internet is available for formal and informal learning settings, it is worth noting that English teachers should be able design and develop their own videos resources for the students. Based on one of the researcher’s personal experience as an English teacher in a high school in Indonesia, designing and developing a video as an instructional media was challenging for her due to limited knowledge and skills related to the design and development process of a video. In addition, limited studies were found regarding the design and development of video as an instructional media (Ou et al., (2019); McHugh & McCauley, 2020), while more studies discussed the emergence of videos in English language teaching contexts (Gromik, 2012; Wang, 2014; Long et al., 2016; Lin & Wang, 2018; Anugerah et al., 2019; Encalada & Sarmiento, 2019; Albaahalal, 2019; Wang & Chen, 2020; Hadijah & Shalawati, 2021; Rojas, 2021). Hence, this paper would shed a light on how an English video lesson is designed and developed for teaching English in an Indonesian high school context. As a result, English teachers could get more insights on how to design and develop a video to support their teaching and learning process. The designed and developed video in this study was a kind of a simple instructional video with an instructor who guided the students in one English lesson topic. To enrich the video content, the video’s transcript was also available to stimulate the development the students’ pronunciation, vocabulary, reading and writing skills, and enjoyment in watching the video.

2. METHOD

This study worked on research and development approach that aims to design and develop videos as an instructional media in English language teaching context for the tenth graders at Senior High School level. This research involved some English teachers and a group of senior high schools students. The research design of this study used ADDIE (Analysis, Designing, Developing, Implementing, and Evaluating) framework. English senior high school syllabus (2013 curriculum) and some questionnaires were used to collect the data in this study, each of the questionnaire was used for different purposes, such as to identify the students’ needs of videos in their learning contexts, to measure the effectiveness of the video design, to assess the content of the video, and to measure the students’ perspective.
towards the use of videos as an instructional media in learning speaking skill. The collected data in this study were predominantly presented quantitatively. The questionnaires were statistically analyzed by calculating the students’ responses and the mean of their responses.

For detailed information on how the design and development stages applied in this study is presented as follows.

2.1 Analysis
The senior high school students’ learning needs were analyzed by studying the syllabus of English language teaching and learning for Senior High School level, observing the students’ learning environment, and distributing questionnaire as an instrument to analyze the students’ needs.

2.2 Designing
In this phase, the videos were designed based on the collected data in the previous stage, such as how the videos should be (from syllabus analysis and observation), what contents that should be presented (from syllabus analysis), and what components that have to be included in the videos (from survey and syllabus analysis).

2.3 Developing
All of the concepts that had been designed at the earlier stages were developed. The production process was implemented in this procedure by creating a video lesson that will be used as an instructional tool to enhance the students’ speaking skill.

2.4 Implementing
The developed videos were assessed to be validated by some experts of instructional media. Some revisions were taken for better development of the videos.

2.5 Evaluating
In this stage, the videos were implemented to the target users to try out the effectiveness of the videos. The users were encouraged to provide their assessment, suggestions, and critiques. The data collection techniques were done through documentation, observation, interview, and assessment. At the first stage, observation was done to gather information on what essential required components to design and develop the video. In this case, the students’ learning atmosphere, and learning materials, and the teacher and students’ teaching and learning activities were observed. The students and teachers’ perspectives towards videos were also investigated, so a proper and effective video lesson can be designed meaningfully to enhance the teaching and learning activities. Lastly, the designed and developed videos were implemented by the researcher and a collaborator aimed to know the effectiveness of the videos. In order to design and develop instructional videos in teaching and learning English at schools, there are some sorts of important documents used for data collection:

a. Syllabus
2013 Syllabus was used as an essential document to identify the sort of video designed which related to the students’ needs. This study just focused on analyzing the English syllabus for the tenth graders of senior high school and vocational high school in Indonesia. The lesson-contents in the syllabus were integrated into designed video. Syllabus analysis guided the researchers in presenting suitable contents for the students’ needs.
b. Questionnaire Sheet for Need Analysis Design

The questionnaire was distributed to a group of senior high school students to identify their needs of video in their learning contexts. The questionnaire consists of four components that relate to the needs of video design in terms of its ease of use, learning opportunities, experiences, preferences, and actual use. All of those components tailored the design and development process of the video-lesson.

c. Observation Sheet for Video Design

The questionnaire sheet was used by some learning media experts to measure the effectiveness of the video design. The sheet consists of two components that represent the assessment for the design and use of the video, they are display and Use. The display component relates to the introduction part quality (such as how the title is presented), slide quality (how the design, layout, and presentation), text quality (readability, mechanics, font colors, font size, and font type), and background quality (equivalent background), colors quality (colors combination and colors resolution), and pictures quality (picture choice, size, and equivalent picture), and sound quality (sound effect and sound volume). Furthermore, the second component relates to the use of videos, it consists of the readability of the manual instruction on the video and interaction on the video, such as communicative, interactive, and bottoms (choices and using). All of the components are scored in range 1 to 4; 1(poor), 2 (good enough), 3 (good), and 4 (very good).

d. Observation Sheet for Video Content

The questionnaire sheet for the video contents were also used by the learning media experts to assess the content of the video. The questionnaire consists of two components; they are learning and lesson components. In terms of learning components, there are some sub-components; standard learning (clearly stated), basic competence (clearly stated), and lesson delivery (interesting and motivating). In addition, the lesson component consist of some sub-components; lesson topics (appropriateness, the needs of the lesson, the benefits of the lesson, and interesting lesson), lesson mastery (accurateness of the lesson, comprehensiveness of the lesson), relevance of the lessons (equivalence between the lesson and curriculum, and equivalence between the lesson and students’ context). The fore mentioned components are also assessed in range 1 to 4; 1(poor), 2 (good enough), 3 (good), and 4 (very good).

e. Questionnaire Sheet for Students’ Perspectives towards the use of videos

The questionnaire sheet is also used to measure the students’ perspective towards the use of videos as an instructional media in learning speaking skill. The components used in this questionnaire is similar to the previous questionnaire used by the learning media experts in assessing the effectiveness of the video design, see point “c”, the observation sheet for video design. However, the distribution of the questionnaire to the students as the target users of the videos was done after the assessment from the learning media experts have been taken.
3. FINDINGS AND DISCUSSION
3.1 Findings
3.1.1 Analysis

As an initial phase of this research, the analysis results were used as one of the main sources in the video design and development process. The analysis was done in four aspects; students’ background, students’ acceptance of videos as learning media, students’ learning environment, and curriculum.

a. Students’ background

One hundred fifteen students from the tenth grade of a state senior high school participated in this study; they mostly have been learning English since elementary school. The age of individuals ranges from 14 to 17 years old, with the highest percentage of students were at 16 years old (73.9%). In terms of the students’ preferences in learning English, most of them agree and strongly agree that English is their favorite subject. In addition, all the participants were categorized as digital native generation who were born with technology and have been closely connected with it in various aspects of their life, such in education, entertainment, communication, business, travel, and shopping. Most of the students were having smartphone as an essential means to support their daily communication activities and learning process; the smartphones ease the students’ interaction with their teachers and friends, and also gather information to support their learning.

b. Students’ acceptance of videos as learning media

To find out the students’ acceptance of videos as learning media, a survey was distributed to the students. The Theory Acceptance Model proposed by Davis (Davis, 1989) was used as the theoretical model in this study. The students’ acceptance were investigated through a questionnaire, adapted from (Bolliger et al., 2015). The survey results revealed that the students’ high acceptances on video lesson. The acceptance components were categorized into the ease of use, learning opportunities, experience in learning, preferences, and actual use. The data found in this research picture the significance of videos, used in learning English as a foreign language. It is undeniable that video is one of meaningful learning resources for many students.

c. Students’ learning environment

Based on the observation at the school where the participants of this research studied, the school environments have been facilitated with some technologies, such as language lab with computers and projectors, and internet access. In terms of the students’ personal gadget, most of them have their smartphones. It can be concluded that the students have been well facilitated to experience meaningful learning through technology integration. However, teachers also need to take efforts to immerse the technology in their teaching and learning context. One of the ways through providing electronic learning resources, such as using video lesson.

d. Curriculum

2013 curriculum of English for seniors and vocational high schools students was analyzed to study a lesson topic in this study; self-introduction. The results of the curriculum analysis are presented in the next information.
Topic : Self-Introduction  
Basic competencies:  
3.1 Menganalisis fungsi sosial, struktur teks, dan unsur kebahasaan dari teks pemaparan jati diri, sesuai dengan konteks penggunaannya.

4.1 Menangkap makna pemaparan jati diri lisan dan tulis.
4.2 Menyusun teks lisan dan tulis sederhana, untuk memaparkan, menanyakan, dan merespon pemaparan jati diri, dengan memperhatikan fungsi sosial, struktur teks, dan unsur kebahasaan, secara benar dan sesuai dengan konteks.

Learning Materials for topic 1 (Self-Introduction)  
Teks lisan dan tulis sederhana untuk memaparkan dan menanyakan jati diri, serta responnya  
Fungsi sosial  
Mengenalkan, menyebutkan identitas, untuk saling mengenal dan menjalin hubungan antar prabadi dengan teman dan guru.  
Unsur kebahasaan  
(1) Kosakata: nama status hubungan keluarga, kekerabatan, teman, tetangga  
(2) Nama profesi pekerjaan, hobi.  
(4) Kata kerja dalam simple present tense.  
(5) Penggunaan nominal singular dan plural secara tepat, dengan atau tanpa a, the, this, those, my, their, dsb secara tepat dalam frasa nominal  
(6) Ucapan, tekanan kata, intonasi  
(7) Ejaan dan tanda baca  
(8) Tulisan tangan.

3.1.2 Design  
In this phase, identification of objectives and components of the design videos are included. The objectives, theoretical framework are embedded into the designed video based upon the principles of cognitive load theory and multimedia learning (Mayer, 2021). All of the components shown in a video format should be created in simple and eligible presentations.  

Based on the cognitive theories and multimedia learning, all of the components shown in a designed video should be in simple and eligible presentation. Depicting the information through technology in a structured manner can help the students to understand the information clearly. To avoid overload information in the video, signaling and weeding strategies are applied (McHugh & McCauley, 2020). Signaling involves highlighting information to direct the students’ attention; it can be shown by placing words on screen at pivotal times, while weeding employs sounds, words, and visuals to remove irrelevant information.  

To further describe the design process, the following sections explore the four design element; relevance, questioning, discrepancy, and novelty.

a. Relevance  
The video is designed by referring to the 2013 curriculum of English for senior and vocational high school students.

b. Questioning  
Questioning strategy is applied to gather the students’ attention (McHugh & McCauley, 2020). A few generic questions are revealed in written and spoken formats. The questions are simple, aimed to direct the students’ thinking toward the presented topic. Some complex questions are also addressed to direct the students to think and practicing the language.
c. Discrepancy

The video is going to be presented in a simple communication context aims to encourage the students to practice the language. Texts are also going to be added into the video to support the students’ speaking skill.

d. Novelty

The designed video is created in a short video format that can be accessed in social media, such as Instagram, Facebook, or WhatsApp. The students do not only can improve their comprehension of the lessons through the videos, but they can also see examples how to perform their tasks.

3.1.3 Development

In this stage, the designed videos were assessed by two learning media experts. The assessments of the experts towards the learning media are presented in the Diagram 1 and 2 as follows.

Diagram 1. Display components of the first video lesson (self-introduction)

Diagram 2. Use components of the first video lesson (self-introduction)

Based on the Diagram 1 and 2, the video has been well developed because most of the components in the evaluation sheet got four points, meaning very good. However, the background quality needs to be improved because it only got three points from the assessors. In the videos, the background was not edited properly, so it affects the display of the video. It does not look worse, but the aesthetic value needs to be improved. The background is one of the essential components in the video display, so it is great when the video can be design in more interesting background.

The observation sheet for the video contents was used to assess the video contents which are based on two components, they are learning and lesson components. The detailed information towards the assessment of the components can be seen in Diagram 3 and 4.

Diagram 3. Learning components of the video lesson (self-introduction)

Diagram 4. Lesson components of the video lesson (self-introduction)
Based on Diagram 3 and 4, the video content for teaching introduction topic for the tenth grade students had been well organized because the assessors agreed to value each component with four scales, meaning the components in the content have been develop excellently. However, an assessor gave a note about the standard learning and basic competence that should be presented on the video slides or explained briefly by the speaker in the video. Furthermore, in terms of the delivery, topic appropriateness, benefits, accurateness, and relevance of the lessons, all of them are very good.

3.1.4 Implementation and Evaluation
The developed videos were presented to the students at the tenth grade of senior high school in order to find out the effectiveness of the videos. The students’ responses towards the videos are presented in the following chart.

Figure 1. Students’ responses towards the video’s display (self-introduction)

Figure 1 represents the students’ responses towards the video display of self-introduction topic. In introduction part quality, all of the participants agree that this section had been well developed because the title had been written completely and interestingly. In terms of slide quality, it still needs to be improved, particularly in presentation section. For text quality, pictures quality, and sound quality had been presented in very good level. The text presented in the video contains readable texts, correct mechanics, clear font colors, size, and type. The video also has equivalence picture, clear sound and interesting sound effect. However, the background quality still needs to be improved even though the background did not significantly affect the video’s Quality.

For the students’ responses towards the video display of compliment topic are presented in the following chart.

Figure 2. Students’ responses towards the video’s display (compliment)

From Figure 2, it can be seen that the display of the video for compliment topic mostly got the highest point (4), meaning that the display components of the video has been well developed. There were only a few participants who place three for the slide quality and text quality.

Furthermore, the students’ responses towards the video use of introduction topic can be found in Figure 3.
3.2 Discussion

The results of this study showed that designing and developing video as an instructional media in English language teaching context was highly recommended since the students have been familiar with the integration of technology to support their learning process. This finding is in line with some previous studies that identified the effectiveness of using videos to enhance students’ learning in English language teaching context (Wang & Chen, 2020; Mete, 2020; Widodo & Rozak, 2016). The students have been equipped with digital technology that can be integrated in their learning activities, such as smartphone that eases their access to the learning resources and interactions with classmates and teachers. However, due to the technology advancement, teachers need to manage how the phones can be used effectively by the students in their learning process (Gromik, 2012). Hence, providing an English video lesson can be one of the ways to guide the students in using their smartphone effectively.

The students also have high acceptance of using video in their learning process due to its ease of use, learning opportunities, experience in learning, preferences, and actual use. The data found in this research picture the significance of videos, used in learning English as a foreign language. It is undeniable that videos are one of meaningful learning resources for many students (Hadijah & Shalawati, 2021). Using videos is one of the strategies that teachers can apply to engage and motivate the students during the
teaching and learning process (Prayudha, 2021).

However, designing and developing video as an instructional media is a challenging task. Teachers need to be equipped with knowledge and skills of designing and transforming video into effective learning media to support students’ language learning objectives. By referring to research and development design that employed ADDIE framework, English language teachers need to follow some steps, initiated from Analysis (A), Designing (D), Developing (D), Implementation (I), and Evaluation (E). The framework was found helpful in designing and development of the video although each stage requires deep investigation and actions to be completed.

As implemented in this study, in analysis stage, the researcher analyzed the students’ background, investigated their readiness on learning by using videos, and worked on a supported document, such as learning syllabus to identify the students’ lessons. In this case, teachers need to invest their time to conduct observations, understand related documents and research on what required components to support the design and development of video as an instructional media.

Designing is another essential construct in ADDIE framework, working on a certain theoretical framework would help teachers as designer in this stage. Cognitive theories and multimedia learning (Mayer, 2021) was found effective in directing the researchers in designing the instructional video. Four main constructs of video design should be concerned by instructional media designers, such as relevance (appropriateness of the lesson-content and the students’ needs), questioning (an instructional strategy to direct the students in the presented lesson in the videos), discrepancy (uniqueness of the video), and novelty (a new quality of the video) (McHugh & McCauley, 2020). All of those components were found helpful to guide the researchers in designing the English lesson video in this study.

In terms of development stage, involving learning media experts were highly required in this study to help the researchers in developing the designed video before it was sent to the targeted participants. In this study, some elements of the designed videos were assessed by the experts; regarding the presentation of video, it refers to display (how the video is presented) and use (how the video can be used by the targeted participants effectively). In relation to the video content, learning and lesson components were assessed in this study.

Furthermore, the designed video was implemented to the target participants and assessed by them in order to know find out the effectiveness of the video to support the students’ learning. This is one of the essential phases in designing and developing an instructional media, such as video because the implementation process allows the researcher to see the strengths and weaknesses of the designed product from the targeted users. Hence, the participants’ assessment towards the video can be considered and employed for the improvement of the video. In this study, the targeted participants mostly had positive feedback towards the lesson video, only a little note about the background of the video that should be presented in more interesting background.
4. CONCLUSION

This study presents how an instructional video for teaching English at senior high school level in Indonesia was done through research and development design (R&D) that employed ADDIE (analysis, design, development, implementation, and evaluation) framework to provide more contextual and authentic learning material for the students. The ADDIE framework was found effective to support the researchers to produce the video as an instructional media. The process of designing and developing videos requires the teachers as designers to examine all of the components in the ADDIE framework and prepare all the resources needed in each phases. Extra times and efforts need to be sacrificed by the teachers as designers, but all of the process that they take sharpened their professional skills because they are not only being able to stand in the class for teaching or transferring information, but they are also have capability in preparing some other components to enhance their teaching activities, such as an instructional media that is integrated with the technology.

To ease the teachers’ roles as learning media designers, it is necessary for them to work collaboratively with the other colleagues or encourage their students to participate in design and development stages. Hence, further studies that focused on collaborative works among teacher and students in designing and developing video as an instructional media need to be conducted since there have been many technology that can facilitate the collaborative activities in more advanced and effective ways.

REFERENCES


